



U.S. Department
of Transportation
**Federal Aviation
Administration**

800 Independence Ave., S.W.
Washington, D.C. 20591

January 26, 2012

Exemption No. 10021A
Regulatory Docket No. FAA-2009-1187

Ms. Rebecca Lynn Luther
Director
WarBird Museum of Virginia, Inc.
P.O. Box 671
Chesterfield, VA 23832

Dear Ms. Luther:

This letter is to inform you that we have granted your petition to extend Exemption No. 10021. It explains the basis for our decision, describes its effect, and lists its revised conditions and limitations.

The Basis for Our Decision

By letter dated November 21, 2011, you petitioned the Federal Aviation Administration (FAA) on behalf of WarBird Museum of Virginia, Inc. (WMOV), for an extension of Exemption No. 10021. That exemption from §§ 91.305, 91.319(a)(2), 119.5(g), and 119.21(a) of Title 14, Code of Federal Regulations (14 CFR) allows WMOV to operate its North American T-28B Trojan (T-28B), which has been issued a limited or experimental airworthiness certificate, to carry passengers on local flights in return for donations.

In your petition, you indicate that there has been no change in the conditions and reasons relative to public interest and safety that were the basis for granting the original exemption.

The FAA has determined that good cause exists for not publishing a summary of the petition in the Federal Register because the requested extension of the exemption would not set a precedent, and any delay in acting on this petition would be detrimental to WMOV.

AFS-12-095-E

Our Decision

The FAA has modified and/or added to the conditions and limitations of Exemption No. 10021 to address several issues raised by another exemption holder. These changes were made to clarify the original content and further define the intent and provide consistency of the safety-related aspects of the conditions and limitations. The FAA will be making these changes to all living historical flight experiences (LHFE) as they are amended or extended.

Please note that the conditions and limitations included with an exemption are not based on specific regulations but are the FAA's means of ensuring an equivalent level of safety. This may necessitate limitations that go beyond the established regulations due to the fact that the proposed operation is, by its need for an exemption, outside the normal regulatory structure.

Limitation No. 16 had previously given the incorrect impression that the aircraft could be operated at weights greater than permitted by operating limitations. The wording was revised to clarify that the aircraft must be operated within the weight and balance limitations prescribed at all times.

Limitation No. 21 has been added requiring a preflight briefing but permitting other than the pilot in command (PIC) to provide the necessary preflight briefing; however, the exemption holder is reminded that in accordance with § 91.107(a)(2), the briefing remains a PIC responsibility. This requirement will be added to all LHFE exemptions.

Passengers wishing to experience aerobatics can obtain rides in aircraft type certificated for aerobatics. The LHFE are designed to provide for experiences not otherwise available to the public. Therefore, limitation No. 22 has been added to ensure that the intent of the exemption is clear. This limitation will be added to all LHFE exemptions in order to clarify the intent of the exemptions.

Limitation No. 23 prohibits formation flight. Formation flight is already prohibited by § 91.111(b), but this was added to ensure that the exemption holders have a clear understanding of this restriction. This limitation will be added to all LHFE exemptions to clarify the intent of the exemptions.

The LHFE exemptions have never permitted passengers to manipulate the flight controls. Only trained crewmembers may manipulate the flight controls. Limitation No. 24 has been added to clarify this issue. This clarification also will be added to all LHFE exemptions.

Limitation No. 25 has been added to require that operators of LHFE develop a continuous analysis and management program for all aircraft subject to this exemption that ensures compliance with its inspection program, training program, and conditions and limitations of this exemption. This requirement will be added to all LHFE exemptions.

The FAA has determined that the justification for the issuance of Exemption No. 10021 remains valid with respect to this exemption and is in the public interest. Therefore, under the authority provided by 49 U.S.C. 40113 and 44701, which the FAA Administrator has delegated to me, I grant your petition, subject to the following revised conditions and limitations.

Conditions and Limitations

1. This exemption applies only to the North American T-28B Trojan (N65491).
2. WMOV must maintain its limited category airplane in accordance with the:
 - a. Maintenance requirements as specified in the appropriate type certificate data sheet, as amended;
 - b. FAA-approved maintenance inspection program that meets the requirements of § 91.409(e), (f)(4), and (g); and
 - c. The appropriate military technical manuals.
3. PIC for the single-engine airplane must:
 - a. Hold at least a commercial pilot certificate with an airplane single-engine land rating and airplane instrument rating;
 - b. Have completed within the previous 12 calendar months, WMOV's PIC qualification and recurrent flight and ground training program in the airplane;
 - c. Have completed within the previous 12 calendar months, WMOV's PIC proficiency check for the airplane;
 - d. Have at least a total of:
 - i. 2,500 hours of aeronautical flight experience, 1,000 hours of aeronautical flight experience in single-engine land airplane, and 25 hours in the airplane; or
 - ii. 1,000 hours of aeronautical flight experience, 200 hours of aeronautical flight experience in a single-engine land airplane, and 100 hours and 50 takeoffs and 50 landings in the airplane; and
 - e. Have accomplished within the previous 90 days, three takeoffs and three landings to a full stop in the airplane. For initial PIC qualification in the specific airplane or if the pilot has allowed his/her takeoff and landing currency to lapse in the airplane, the takeoff and landing currency may not be accomplished during passenger-carrying operations.

4. WMOV must develop and maintain written qualification and recurrent ground training programs for its PIC in the airplane that cover the training subjects listed below. Each PIC must receive the following training within the previous 12 calendar months and be found to be competent and proficient in these areas prior to serving in a PIC position in the airplane:

REQUIRED TRAINING TASKS	
a. General information and description of the airplane;	
b. Airplane limitations;	
c. Airplane servicing;	
d. Airspeeds;	
e. Fuel system;	
f. Electrical system;	
g. Hydraulic system;	
h. Engines;	
i. Instruments and avionics;	
j. Landing gear, brakes, controls, and flaps systems;	
k. Propeller;	
l. Emergency procedures, including—	
(i) Instruction in emergency assignments and procedures, including coordination among crewmembers;	
(ii) Individual instruction in the location, function, and operation of emergency equipment, including—	
A. First aid equipment and its proper use; and	
B. Portable fire extinguishers, with emphasis on the type of extinguisher to be used on different classes of fires;	
(iii) Instruction in the handling of emergency situations, including—	
A. Fire in flight or on the surface and smoke control procedures with emphasis on electrical equipment and related circuit breakers found in cabin areas; and	
B. Illness, injury, or other abnormal situations involving passengers or crewmembers;	
m. Weight and balance;	
n. Performance planning; and	
o. Airplane's checklist.	

5. WMOV must develop and maintain a written qualification and recurrent ground training program for its PIC in the single-engine airplane that covers the areas of operations and tasks, as listed in the following table of training tasks. Each PIC must successfully accomplish this airplane specific training before being assigned PIC responsibilities and duties. Each PIC must receive and accomplish the following training within the previous 12 calendar months and be found to be competent and proficient in these areas prior to serving in a PIC position in the single-engine airplane:

REQUIRED TRAINING TASKS	
a. Preflight Preparation, including—	(i) Airplane exam (oral or written); and (ii) Airplane performance & limitations (oral or written).
b. Ground Operations, including—	(i) Preflight inspection; (ii) Cockpit resource management; (iii) Powerplant start procedures; (iv) Taxiing; and (v) Pre-takeoff checks.
c. Takeoffs & Departures, including—	(i) Normal & crosswind takeoffs; (ii) Powerplant failure; and (iii) Rejected takeoffs.
d. In-flight Maneuvers, including—	(i) Steep turns; (ii) Approach to stalls; (iii) Powerplant failure; and (iv) Specific flight characteristics.
e. Landings & Approaches to Landing, including—	(i) Normal & crosswind approaches & landing; (ii) Maneuvering to a landing with a simulated powerplant failure; (iii) Rejected landing; and (iv) Landing from a no flap or a nonstandard flap approach.
f. Normal & Abnormal Procedures, including—	(i) Powerplant; (ii) Fuel system; (iii) Electrical system; (iv) Hydraulic system; (v) Environmental & pressurization system (as appropriate and if equipped); (vi) Fire detection & extinguishing system; (vii) Navigation & avionics system; (viii) Automatic flight control system, electronic flight instrument system, & related systems (as appropriate and if equipped); (ix) Flight control system; (x) Anti-ice & de-ice system; and (xi) Airplane & personal emergency equipment.
g. Emergency Procedures, including—	(i) In-flight fire & smoke removal; (ii) Rapid decompression (as appropriate and if equipped with a pressurization system);

<ul style="list-style-type: none"> (iii) Emergency descent; (iv) Ditching; and (v) Emergency evacuation.
<ul style="list-style-type: none"> h. Post-flight Procedures, including— <ul style="list-style-type: none"> (i) After landing procedures; and (ii) Parking and securing airplane.

6. WMOV may not use a pilot nor may any pilot serve as a pilot in any airplane unless, since the beginning of the 12th calendar month before that service, that pilot has passed a competency check given by the FAA or an authorized check pilot in that airplane to determine the pilot's competence in practical skills and techniques in the appropriate airplane. The competency check will consist of the appropriate maneuvers and procedures currently required for the original issuance of the commercial pilot certificate. The FAA's Richmond Flight Standards District Office (FSDO) will determine what maneuvers and procedures are critical, such as preflight preparation, ground operations, takeoffs and departures, and normal procedures, etc., and maneuvers and procedures that may be unsafe for a particular airplane.
7. Recurrent flight training for pilots must include, at least, flight training in the maneuvers and procedures in this exemption. However, satisfactory completion of the check required by this exemption within the preceding 12 calendar months may be substituted for recurrent flight training.
8. WMOV must document and record all ground and flight training and/or testing required by this grant of exemption in a manner acceptable to the FAA's Richmond FSDO. That documentation and records must contain the following information:
 - a. Date of each training session;
 - b. Date of each testing session;
 - c. The amount of time of each session of ground and flight training given;
 - d. The amount of time of each session of ground and flight testing given;
 - e. Location where each session of ground and flight training was given;
 - f. Location where each session of ground and flight testing was given;
 - g. The airplane identification number in which each flight training session was received;
 - h. The airplane identification number in which each flight testing session was received;
 - i. The name and certificate number of the pilot who provided each session of training;
 - j. The name and certificate number of the pilot who provided each session of testing;
 - k. The signature and printed name of the pilot who received the training. That pilot's signature will serve as a verification of having received each session of training; and

- l. The signature and printed name of the pilot who received the testing. That pilot's signature will serve as a verification of having received each session of testing.
9. When requested, the WMOV's pilot qualification and recurrent ground- and flight-training programs and/or records listed in conditions above must be made available to the Richmond FSDO, 5707 Hunstman Road, Richmond, Virginia 23250, (804) 222-7494.
10. WMOV must have the services of an FAA-certificated airframe and powerplant mechanic or an appropriately rated repair station available at all stopovers to perform all required maintenance inspections and repairs.
11. WMOV will maintain the following information and records and will make those records available for review to the FAA when requested:
 - a. The name of each pilot crewmember WMOV authorizes to conduct flight operations in its airplane under the terms of this exemption;
 - b. Copies of each PIC's pilot certificate, medical certificate, qualifications, and initial and recurrent training and testing documentation to comply with the conditions listed above; and
 - c. Records of maintenance performed and maintenance inspection records to comply with the conditions above, as appropriate. Maintenance and inspection records must meet the requirements of §§ 43.9, 43.11, and 91.405.
12. Before permitting a person to be carried on board its airplane for the purposes authorized under this exemption, WMOV will inform that person that its airplane holds only a limited airworthiness certificate; the significance of the airworthiness certificate as compared to a standard airworthiness certificate; and that the FAA has authorized this flight under a grant of exemption from the requirements of §§ 91.315, 91.319, 119.5(g), and 119.21(a). The explanation of the significance of a limited airworthiness certificate, experimental airworthiness certificate compared to a standard airworthiness certificate must include at least the following information:
 - a. The FAA has not established nor has it approved limited category airworthiness certificated airplane manufacturing standards. The FAA has not established nor has it approved experimental category airworthiness certificated airplane manufacturing standards. In contrast, standard category airworthiness certificated airplanes are manufactured to FAA-approved standards, including standards addressing the design of the airplane and life-limited parts;
 - b. Limited category airworthiness certificated airplanes are issued when the FAA finds the airplane—

- i. Has been previously issued a limited category type certificate and the airplane conforms to that type certificate; and
 - ii. To be in a good state of preservation and repair and is in a safe operating condition;
 - c. An airplane may be issued an experimental airworthiness certificate for the purpose of exhibition when the airplane is intended only for exhibition of the airplane's flight capabilities, performance, or unusual characteristics at airshows, motion picture, television, and similar productions and the maintenance of exhibition flight proficiency, including (for persons exhibiting the airplane) flying to and from such airshows and productions; and
 - d. Standard category airworthiness certificates are issued for an airplane when the FAA finds the—
 - i. Airplane has been built and maintained in accordance with that airplane's type certification standards as established by the FAA; and
 - ii. Airplane's inspection and maintenance requirements are in compliance with the applicable Federal Aviation Regulations.
13. WMOV must notify the Richmond FSDO within 24 hours of any of the following occurrences by written report, by electronic mail, or by facsimile:
- a. Each in-flight fire in any system or area that requires activation of any fire suppression system or discharge of a portable fire extinguisher;
 - b. Each exhaust system component failure, including the turbocharger components, that causes damage to any engine, structure, cowlings, or components;
 - c. Each airplane component or system that causes, during flight, accumulation or circulation of noxious fumes, smoke, or vapor in any portion of the cabin or crew area;
 - d. Except for training, each occurrence of engine shutdown or propeller feathering, and the reason for such shutdown or feathering;
 - e. Each failure of the propeller governing systems or feathering systems;
 - f. Any landing gear system or component failure or malfunction that requires use of emergency or standby extension systems;
 - g. Each failure or malfunction of the wheel brake system that causes loss of brake control on the ground;
 - h. Each airplane structure that requires major repair due to damage, deformation, or corrosion, and the method of repair;
 - i. Each failure or malfunction of the fuel system, tanks, pumps, or valves;
 - j. Each malfunction, failure, or defect in any system or component that requires taking

emergency action of any type during the course of any flight; and

- k. For the purpose of this section, “during flight” means the period from the moment the airplane leaves the surface of the earth on takeoff until it touches down on landing.

14. All flight operations must be conducted:

- a. At a minimum operating altitude of not less than 1,000 feet above ground level (AGL);
- b. Between the hours of official sunrise and sunset, as established in the American Air Almanac, as converted to local time;
- c. Within a 25-statute-mile radius of the departure airport with landings only permitted at the departure airport;
- d. With a minimum flight visibility of not less than 3 statute miles and a minimum ceiling of not less than 1,500 feet AGL;
- e. Passenger-carrying operations for compensation may be conducted at distances greater than 25 statute miles of the departure airport up to 50 statute miles with concurrence of the FAA FSDO having geographic responsibility for the aviation event. For such flights, landings are only permitted at the departure airport. The operator must provide information pertaining to the proposed route of flight, which will avoid densely populated areas or congested airways in accordance with 14 CFR § 91.319(c) for airplane certificated in the experimental category. Those operators utilizing airplane certificated in the limited category are not bound by the restriction regarding the avoidance of densely populated areas or congested airways;
- f. For passenger-carrying flights greater than 25 statute miles from the departure airport and up to 50 statute miles, the PIC must obtain weather reports and forecasts prior to flight and valid for the duration of the proposed operation that indicate that the weather would be no less than 5 statute miles visibility and cloud ceilings no less than 2,000 feet AGL. Passenger-carrying operations shall be terminated if ceiling and visibility become less than the minimum required by these conditions and limitations. Weather forecasts listing discriminators such as probability (PROB), becoming (BECOMG), or temporarily (TEMPO) shall be limiting; and
- g. The airplane may only be operated from an airport that has a fire station or fire-fighting services available or within close proximity of the airport.

15. No persons other than the assigned flight crewmembers may be permitted on the pilot station of the airplane during flight operations.

16. All flight operations must carry no more than the maximum number of passengers permitted by the airplane's weight and balance limitations and number of approved seats in the airplane.
17. All airplanes must have the equipment listed in §§ 91.205(b) and 91.207 and that equipment must be in an operable condition during the flight.
18. WMOV must hold and continue to hold a determination from the U.S. Internal Revenue Service that it is a § 501(c)(3) nonprofit, tax-exempt, charitable organization under §§ 509(a)(1) and 170(b)(1)(A)(vi) of the Internal Revenue Code.
19. WMOV must notify the Richmond FSDO at least 5 working days (Mondays through Fridays) before conducting any PIC or second in command (SIC) initial or recurrent qualification training and any PIC or SIC initial or recurrent proficiency checks required to be conducted under the terms of this grant of exemption.
20. No later than 72 hours prior to commencing flight operations under the terms of this grant of exemption, WMOV must notify the jurisdictional FAA FSDO where it intends to conduct the flight operations and shall provide a copy of this exemption to that jurisdictional FAA FSDO.
21. Prior to flight, the PIC must ensure that a passenger briefing meeting the scope and content of § 135.117 has been provided to the passenger(s).
22. The PIC is prohibited from performing aerobatic flight while passengers are onboard the aircraft.
23. For all aircraft subject to this exemption, flight within 500 feet of another aircraft (i.e., formation flying) is prohibited.
24. No persons other than the assigned flight crewmembers may be permitted to manipulate the flight controls during flight operations.
25. The exemption holder must develop a continuous analysis and management program for all aircraft subject to this exemption that ensures compliance with its inspection program, training program, and conditions and limitations of this exemption.

Failure to comply with any of the conditions and limitations of this grant of exemption will be grounds for the immediate suspension or revocation of the exemption.

The Effect of Our Decision

Our decision extends the termination date of Exemption No. 10021 to March 31, 2014, unless sooner superseded or rescinded. This letter must be attached to, and is a part of, Exemption No. 10021.

Sincerely,

/s/

Raymond Towles
Acting Director, Flight Standards
Service